

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012087**Date Inspected:** 23-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW welding of weld joint SSSL4-1F/L-100 located inside PCMK south tower, lift 4, skins A and E, corner closure plate to top of 123M double diaphragm. Welder was identified as 052930. ZPMC QC was identified as CWI Gong Liang Zhu (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3213-B-U2a-1.

SMAW welding of weld joint SSSL4-1F/L-32 located inside PCMK south tower, lift 4, skins A/E, corner closure plate to bottom of 123M double diaphragm. Welder was identified as 057220. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-3213-B-U2a-1.

FCAW welding of weld joint SSSL4-1C/L-100 located inside PCMK south tower, lift 4, skin E to corner closure plate to top of 119M double diaphragm. Welder was identified as 040261. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-4333-TC-P4-F.

SMAW repair welding of weld joint SSSL4-1B/L-49 located inside PCMK south tower, lift 4, skins B/C corner, corner angle plate to skin B at 120M. Welder was identified as 050038. ZPMC QC was identified as QC1. The

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welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-2G(2F)-repair. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Li Nan.

FCAW welding of weld joints SSSL4-1K/L-32, 34 located inside PCMK south tower, lift 4, skins A and E to corner closure plate at 123M double diaphragm. Welder was identified as 053869. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Sun Tian Liang, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-4333-TC-P4-F and WPS-B-T-4332-TC-P4-F respectively.

SMAW welding of weld joint SSSL4-1K/L-97 located inside PCMK south tower, lift 4, skins A/E corner, corner closure plate to top of 143M double diaphragm. Welder was identified as 050289. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Sun Tian Liang, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3213-B-U2a-1.

FCAW welding of weld joints SSSL4-1I/L-97, 99 located inside PCMK south tower, lift 4, skins A and E to corner closure plate at 135M double diaphragm. Welder was identified as 040533. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Sun Tian Liang, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-4333-TC-P4-F and WPS-B-T-4332-TC-P4-F respectively.

SMAW welding of weld joint SSSL4-1I/L-29 located inside PCMK south tower, lift 4, skins A/E corner, corner closure plate to bottom of 135M double diaphragm. Welder was identified as 040581. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Sun Tian Liang, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3213-B-U2a-1.

SMAW welding of weld joint SSSL4-1J/L-28 located inside PCMK south tower, lift 4, skins A/E corner, corner closure plate to bottom of 139M double diaphragm. Welder was identified as 040269. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Sun Tian Liang, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3213-B-U2a-1.

Bay 11

No welding was observed being performed in Bay 11.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

No significant conversations.

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## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
<b>Reviewed By:</b>	Dawson,Paul	QA Reviewer

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